

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (currently amended) ~~AgroFibre~~ **An agricultural fibre** slurry comprising:
mechanically processed agricultural fibres, ~~AgroFibre~~; and a natural
adhesive formulation, ~~AgroBinder~~; and

wherein said mechanical processing of the agricultural fibres is chemical-free in which the agricultural fibres are mechanically pressed, digested under hydrothermal conditions, cut and refined;

said natural adhesive formulation is carrier, no-carrier and carrier-no-carrier type which is starch-based, alkaline and viscosity stable that is biodegradable, self-retaining and water resistant, said natural adhesive formulation comprises water, ~~starch-carrier~~, ungelatinized starch, modified starch, green-bond developing agent and caustic ~~[[]]~~ ; and

wherein the major component in the agricultural fibre slurry is the agricultural fibres.

2. (currently amended) The ~~AgroFibre~~ **agricultural fibre** slurry as claimed in claim 1, wherein the agricultural fibres are digested at hydrothermal conditions using live superheated steam and at temperature between 150 to 250 deg C, and pressure between 0.3 to 3MPa for a residence time of 10 to 120 ~~min~~ minutes.

3. Claim 3 (canceled).

4. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[4]]~~ **13**, wherein **AgroBinder the natural adhesive formulation** is manufactured by cooking starch carrier phase at pH between 12-14 to give gelatinized starch, and to which ungelatinized starch is added under continuous heating and stirring; green-bond developing agents are subsequently added and mixed for at least **30 min minutes** to obtain homogeneous gelatinized mixture.

5. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[3]]~~ **4**, wherein **AgroBinder the natural adhesive formulation** ~~is self-retaining~~ **retains** to **AgroFibre the agricultural fibres** due to the addition of **a** retaining aid, ~~preferably oxidized starch~~, to the **AgroBinder the natural adhesive** formulation.

6. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[4]]~~ **5**, wherein caustic, ~~preferably in the form of aqueous solution~~, is added to the **AgroBinder the natural adhesive** formulation.

7. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[5]]~~ **6**, wherein green-bond developing agent, ~~preferably boron-containing compound~~, is added to the **AgroBinder the natural adhesive** formulation.

8. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[6]]~~ **7**, wherein functional additives such as sizing, wet strength and grease barrier agents are added to the slurry to enhance functional performance as options for specific applications.

9. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim **1**, **wherein the slurry** is obtained by thoroughly mixing **AgroFibre the agricultural fibres** with **AgroBinder the natural adhesive formulation** and water to form aqueous slurry.

10. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[9]]~~ **9, wherein the slurry** is diluted with water to low consistency slurry between 0.1 to 3% as the feedstock for the manufacturing of moulded shape bodies and paper liners.

11. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[9]]~~ **10**, wherein **a** vacuum forming and thermal curing process is used to manufacture moulded shape bodies.

12. (currently amended) The **AgroFibre agricultural fibre** slurry as claimed in claim ~~[[10]]~~ **11**, wherein low consistency pulp is substituted with low consistency **AgroFibre agricultural fibre** slurry for the manufacturing of paper liners.

13. (new) The agricultural fibre slurry as claimed in claim 2, wherein the natural adhesive formulation comprises a starch carrier.

14. (new) The agricultural fibre slurry as claimed in claim 5, wherein the retaining aid is oxidized starch.

15. (new) The agricultural fibre slurry as claimed in claim 6, wherein the caustic is in the form of aqueous solution.

16. (new) The agricultural fibre slurry as claimed in claim 7, wherein the green-bond developing agent is a boron-containing compound.